

## GLOSSARY

- Abatis**—Similar to a windfall. Trees are felled at an angle of about 45° to the enemy's direction of approach. The trees are left attached to the stump to retard removal. Along trails, roads and slopes the abatis will cause considerable difficulty to the enemy's capability to ski and move vehicles.
- Ablation**—The combined process (such as, sublimation, melting or evaporation) which removes ice and/or snow from the surface of a glacier, snowfield, etc.
- Accumulation**—Net gain of snow or ice during a specific period of time. The opposite of ablation.
- Ahkio**—Boat-like sled used for pulling squad equipment.
- Blizzard**—A severe weather condition characterized by low temperatures and strong winds bearing great amounts of snow. The National Weather Service has established the following criteria: Winds 28 knots (32 mph) or higher, low temperatures and sufficient snow to reduce visibility to less than 152 meters (500 ft).
- Breakup**—Period of spring thaw during which the ground surface is excessively wet and soft, and ice is disappearing from streams and lakes. Duration of the breakup period varies usually from one to six weeks depending on regional and local climatic conditions. The breakup season causes difficult movement problems.
- Chilblains**—A cold injury which causes lesions—usually on the hands—caused by prolonged or repeated exposure to mild humid cold.
- Chinook**—The name given to a foehn on the eastern side of the Rocky Mountains, hence, a warm dry wind on the lee side of a mountain.
- Cold Injury**—An inclusive term applied to injuries resulting from cold. The most common are frostbite, trenchfoot, immersion foot, and chilblains.
- Cornice**—An overhanging formation of snow, usually on a ridge or at the top of a gully on a mountainside.
- Crack**—A fissure or crevice in a rock or ice formation.
- Crevasse**—A fissure or rift in glaciers, shelf ice, or other land-ice formations, caused by thermal changes in the ice or by motion of the ice over underlying obstacles.
- Dry Snow Zone**—Zone of ice cap where maximum temperatures are not high enough to cause melting.
- Fast Ice**—All types of ice, broken or unbroken, attached to the shore, beached, stranded, or attached to the bottom in shoal water.
- Freezeup**—Period during which the ground surface freezes and ice cover forms on streams and lakes. This period varies from one to three months depending on regional and local climatic conditions. Maintaining mobility during this period becomes easier as the period progresses.
- Frostbite**—A cold injury caused by freezing of the tissues.
- Frost Boil**—Accumulation of excess water and mud in subsurface materials during spring thawing. Usually it weakens the surface and may break through, causing a quagmire.
- Frost Line**—(See Frost Table.)
- Frost Mound**—A localized uplift of land surface caused by frost heaving or by ground water pressure. Also called earth mound, earth hummock, pals, pingo, or pingok.
- Frost Table**—More or less irregular surface that represents the depth of penetration of the winter frost in the seasonal frozen ground. It may or may not coincide with the permafrost table.
- Fuel Tablets**—Concentrated chemical fuel dispensed in tablet form for heating rations.
- Glacier**—Any field or stream of ice of land origin. It may be either active or stagnant.
- Greyout**—A phenomenon which occurs over a snow covered surface during twilight or when the sun is close to the horizon. The re-

sult is an overall greyness to surroundings causing a loss of depth perception. Greyout is similar to whiteout except that during greyout the horizon is distinguishable.

*Icecrete*—A mixture of sand, gravel, and water, frozen and used as a concrete substitute.

*Ice Field*—A stagnant glacier.

*Ice Fog*—A type of fog composed of suspended particles of ice, partly ice crystals 20 to 100 microns in diameter. It is formed by introduction of water vapor into clear, calm air of low temperatures. Ice fog normally will be found in the vicinity of populated areas of temperatures of  $-35^{\circ}\text{F.}$ , or lower, but may occur at temperatures as warm as  $-20^{\circ}\text{F.}$  Ice fog increases in frequency with decreasing temperature until it is almost always present at air temperatures of  $-50^{\circ}\text{F.}$  in the vicinity of a source of water vapor. Ice fog may form over a body of troops, herd of animals, bivouac areas, motor parks, airfields, convoys, and gun positions during firing.

*Immersion Foot*—An injury resembling trenchfoot caused by prolonged immersion of the extremities in warm water (up to  $70^{\circ}\text{F.}$ ).

*Layer Principle*—Attaining additional insulation by trapping dead air in the space(s) between successive layers of clothing. Two or more thicknesses of clothing, with intervening air space, provide greater insulation than the same thickness of clothing of the same material in a single layer.

*Muskeg*—Poorly drained organic terrain which is characteristic of the Subarctic, covered with a thick, resilient carpet of water-sodden mosses and tussocks, and underlain by a high water table, peat of variable thickness, and often permafrost.

*Permafrost*—Permanently frozen ground. A thickness of soil or other surficial deposit or even a bedrock at a variable depth beneath the surface of the earth in which a temperature below freezing has existed continuously for thousands of years.

*Poling*—A pushing movement of arms and body with the ski poles against the snow to in-

crease momentum in the slide. Single poling is referred to when each pole is used alternately to obtain this propulsion. Double poling is the use of both poles at the same time.

*Sastruga*—Zastruga (Russian)—One of a series of long parallel snow ridges, occurring on the open plains and formed by the action of winds.

*Skijoring*—Troops mounted on skis and towed behind vehicles.

*Slough*—Part of the natural drainage system for either an area or a stream. Water will sometimes back up into this area leaving ponds and temporary streams. Generally the surface will be muddy and covered with vegetation of all types.

*Snow Bridge*—The snow mass that sometimes covers the surface opening of a crevasse.

*Tractor Sled Train (for oversnow movement)*—A train usually composed of cargo sleds and wanigans and towed by track laying or other type oversnow vehicles.

*Treeline*—The upper limit of erect trees in mountainous regions or the northern limit of erect trees in the Arctic.

*Trenchfoot*—A cold injury caused by prolonged exposure to a cold environment (near freezing) that is damp or wet.

*Tundra*—A flat or gently rolling area with a muck or rock surface over permafrost and consisting of a low mat of grasses, shrubs, and other plants. This area is found above or north of the treeline.

*Tussock*—A tuft or clump of grass or sedge.

*Whiteout*—A condition of visibility which exists when an overcast sky prevents shadows, and snow covered terrain reflects light at about the same intensity as the sky causing the horizon to be undistinguishable and the recognition of irregularities in terrain very difficult. Only dark objects can be seen. Fog, ice fog, and blizzard conditions will sometimes create a similar situation.

*Windchill*—The combined cooling effect of wind and air temperature on heated bodies.